

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 October 2003 (02.10.2003)

PCT

(10) International Publication Number
WO 03/081845 A2

(51) International Patent Classification⁷: H04L 12/24 (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number: PCT/EP03/03201

(22) International Filing Date: 27 March 2003 (27.03.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02007008.2 27 March 2002 (27.03.2002) EP
PCT/EP03/02704 14 March 2003 (14.03.2003) EP

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(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 03/081845 A2

(54) Title: NETWORK MANAGEMENT SYSTEM

(57) **Abstract:** The present invention discloses a method of managing a network, especially an optical network, including a plurality of nodes which are interconnected in an arbitrary topology so as to be capable of carrying traffic between selected nodes, comprising the steps of providing a supervisory network by means of supervisory channels between the nodes; providing a node manager which is comprised of one or more software modules in each node; establishing of supervisory connections over one or more supervisory channels between selected nodes through which the node manager communicates with other node manager in other nodes; providing a node module in each node manager that provides an interface to the hardware settings of the respective node; providing a master module in at least one node manager; establishing of supervisory connections over one or more supervisory channels between selected nodes through which the master module communicates with the node modules; amending and/or monitoring of hardware settings in selected nodes with respective node module of the node; controlling of the amendments carried out by the node modules and/or processing of the monitored hardware settings by the master module.